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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,783	02/11/2004	Hiroshi Asano	011.2-11481-US01	3253
490 7590 02/22/2007 VIDAS, ARRETT & STEINKRAUS, P.A. 6109 BLUE CIRCLE DRIVE SUITE 2000 MINNETONKA, MN 55343-9185			EXAMINER TRAN, BINH X	
			ART UNIT 1765	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/22/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/776,783

Applicant(s)

ASANO ET AL.

Examiner

Binh X. Tran

Art Unit

1765

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-16 is/are pending in the application.
- 4a) Of the above claim(s) 6-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5 and 13-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Claim Interpretations

1. Claims 1, 3-5, 13-16 are composition claims. Applicants disclose the intended use for the composition for the above claims. According to the MPEP 2111.02, "If the body of a claim fully and intrinsically sets forth all of the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention's limitations, then the preamble is not considered a limitation and is of no significance to claim construction." Thus, the examiner will not give any patentable weight on the intended use.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1, 3-5, 13-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1 and 15 applicants use two different transition phrases "consisting of" and "comprises" (i.e. "the polishing composition consisting of" and "wherein the water-soluble amine comprises"). According to the MPEP 2111.03, the transitional term "comprising" is inclusive or open-ended and does not exclude additional, unrecited

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elements or method steps. The transitional term "consisting of" excludes any element, step, or ingredient not specified in the claim. The term "comprises" is a open-ended, and it is used inside the term "consisting of". Therefore, it is unclear from the claim whether the claims are an open-ended or not.

Claims 3-5 and 13-14, 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite because they depend on indefinite claim 1 or 15.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 1, 3-5, 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Sezi et al. (US 5,229,258).

Respect to claims 1, 3-4 and 13, Sezi discloses a composition consisting of 2 wt% triethylenetetramine and 98 wt% water (See col. 5 line 44-47).

Respect to claim 5, Wang does not explicitly disclose the selection ratio between silicon dioxide and polycrystalline silicon number. However, Sezi's composition is identical with applicant's composition (i.e. consisting of water and triethylenetetramine). Sezi's composition further has the weight percentage of water and triethylenetetramine

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within applicant's claimed range. Thus, it is inherently that Wang's composition has the selection ratio of 100 or more.

6. Claims 1, 3-5, 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Barnes Jr et al. (US 4,743,418).

Respect to claims 1, 3, 14 Barnes discloses a polishing composition consisting of water and water-soluble amine comprises tetraethylenepentamine at the concentration of 0.03 to 1.0 wt. % (See Table I, Example 7-11, 1st stage treatment; or example 1-5, 2nd stage treatment, col. 3 lines 65-66; Note: the pentamine in Table I is tetraethylene pentamine; within applicant's range of 0.001 to 10% by weight).

Respect to claim 4, Barne does not explicitly disclose the content of water.

However, the content of water can be calculated as following:

Weight percent of water = 100% - wt% of tetraethylenepentamine

When the wt% of tetraethylenepentamine equals to 0.03% (example 1, Table I)

Weight percent of water = 100% - 0.03% = 99.97 wt.% (within applicant's range of 90 to 99.998%).

When the wt% of tetraethylenepentamine equals to 1% (example 6, Table I)

Weight percent of water = 100% - 1% = 99 wt.% (within applicant's range of 90 to 99.998%).

Respect to claim 5, Barne does not explicitly disclose the selection ratio between silicon dioxide and polycrystalline silicon number. However, Wang's composition is identical with applicant's composition (i.e. consisting of water and

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tetraethylenepentamine). Barne composition further has the weight percentage of water and tetraethylenepentamine within applicant's claimed range. Thus, it is inherently that Barne's composition has the selection ratio of 100 or more.

7. Claim 15 is rejected under 35 U.S.C. 102(e) as being anticipated by Yoshida et al. (US 20020081949 A1).

Respect to claim 15, Yoshida discloses a composition consisting of water, and water-soluble amine, wherein the water-soluble amine comprises triethylenetetramine, and the component other than water and water soluble amine is not present is a solid state (i.e. pH adjust agent) (see paragraph 0057,0073, 0090 Table 1, example 9).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida et al. (US 2002/0081949 A1) in view of Li et al. (US 2004/0092102 A1).

Respect to claim 16, Yoshida fails to the present of surface-active agent in the composition. In an abrasive-free composition, Li teaches use surfactant in order to stabilize the composition (read on surface active agent, paragraph 0104-0105, Li's claim 14). It would have been obvious to one having ordinary skill in the art, at the time of invention, to modify Yoshida in view of Li by using surfactant because it will help to stabilize the composition.

Response to Arguments

11. Applicant's arguments with respect to claims 1, 3-5 (in page 7-8 of the remark) have been considered but are moot in view of the new ground(s) of rejection.

A new ground of rejection was set forth to discuss applicant's new claims.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh X. Tran whose telephone number is (571) 272-1469. The examiner can normally be reached on Monday-Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Binh Tran

Binh X. Tran